

11/9/17 "Quality is not an act, it is a habit" -Aristotle

HW: Rest up, Monday it gets real!

AIM: How do we use the calculator to evaluate derivatives?

Warm Up:

.


1) Given $f(x) = 3x^4 - 5x^2 + 7x - 1$
find $f'(2)$

$$f'(x) = 12x^3 - 10x + 7$$

$$f'(2) = 12(2)^3 - 10(2) + 7$$

$$f'(2) = 83$$

Math
choice #8

NORMAL FLOAT AUTO a+bi DEGREE MP 

$$\frac{d}{dx}(3X^4 - 5X^2 + 7X - 1)|_{X=2} \quad 83.000024$$

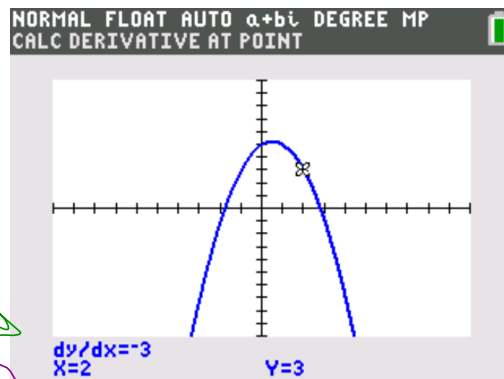
$$\frac{d}{dx}(Y_1)|_{X=2} \quad 83.000024$$

Alpha Trace 1

2) Find an equation of tangent
to $y = -x^2 + x + 5$ @ $x = 2$

2nd Trace 6

then enter the x-value



$$y - 3 = -3(x - 2)$$

⊗ Find the equation of the
tangent line to $f(x) = (2x^2 + 3)^5 \cdot e^{3x^4}$
@ $x = 1$

$$y - 62767.303 = 1004338.9(x - 1)$$